

METHOD AND APPARATUS FOR DETERMINING  
AN ANGLE OF GYRATION IN A GYRATORY COMPACTOR

ABSTRACT OF THE DISCLOSURE

An apparatus adapted to interact with a cylindrical mold for a gyratory compactor so as to determine a gyration angle of the mold is provided, wherein the mold is adapted to contain a sample therein. Such an apparatus comprises a rigid disk-shaped plate defining an axis and a periphery, with the plate being adapted to be disposed within a wall of the mold. At least one inductive sensing device is operably engaged with the plate, wherein the at least one inductive sensing device is configured to measure a proximity of the at least one inductive sensing device with respect to the wall of the mold and to produce a corresponding signal indicative of the gyration angle of the mold. The gyration angle of the mold may be determined either statically or dynamically.

Associated apparatuses, systems, and methods are also provided.